## MISCELLANEA RHYNCHOTALIA.-No. 7.

By G. W. Kirkaldy.

Fam. Tetigonidde (including Membracinae). Cyrtoisa, Fitch $=$ Cyrtosia, Stàl $=$ Cyrtolobus, Goding.
This genus was spelt as above by Fitch, and is not preoccupied.

> Fam. Fulgoride.
> Cathedra, gen. nov.

Head subhorizontal, slightly upcurved at the apex, where it is acutangular and simple (instead of being trilobate as in Phrictus, Spinola); head also much longer than in the latter genus, and is laterally multidentate, the teeth being acutely triangular; the vertex is somewhat obtusely spinose below the eyes, sublaterally, while in Phrictus it is provided with a strong, acute, upcurved spine on each side. Pronotum much flatter than in Spinola's genus, the posterior margin truncate and not spinose. Elytra more pointed apically, the costa more arched, and the costal area broader.

Type, P. serrata (Fabricius), which, apart from the structural differences, has a very different colour-appearance from Phrictus diadema (Linné), the only species of that genus, as serrata is of Cathedra, known to me; the latter is figured by Stoll, 1788, "Cicaden," pl. 29, figs. 170 and A. Stal includes it in his genus Laternaria (=Fulgora, Linn., Kirk.), an obvious lapsus.

## Perkinsiella, gen. nov.

Closely allied to Areopus, Spinola, but distinguished by the first segment of the antennæ being distinctly shorter than the second; distinguished from Dicranotropis, Fieber, to which it bears some resemblance, by the form of the frons, and by the flattened apically dilated first segment of the antennæ. Type, P. saccharicida, Kirkaldy.

Second segment of antennal peduncle about oue-half longer than the first; flagellum about one-third longer than the entire peduncle, first peduncular segment much wider at apex than basally, flattened and explanate ; second segment nearly as wide at base as the apex of the first segment [in Arcopus it is much narrower, while the first segment is more parallel-sided]. Exterior longitudinal nervure of corium forked near the base, and its exterior branch forked near its middle ; interior longitudinal nervure forked near the apex. Membrane with six nervures, the fourth (commencing inwardly) forked; the first area has an incomplete nervure reaching only to the middle. Other characters as in Arropus.

> P. saccharicida, sp. nov.

Long-winged form, đ 오. Tegmina elongate, narrow, extending far beyond apex of abdomen, interior half of clavus and corium more or
less faintly smoky, a long dark smoky stripe on middle of membrane, three or four of nervures of the latter smoky at apex.

Short-winged form, $ㅇ$. Tegmina reaching only to base of fifth segment, costa more arched, apex more rounded, neuration similar but shortened. Tegmina hyaline, colourless; wervures pale testaceons brownish, with blackish brown non-piligerous dots (in both forms).
$\mathrm{d}^{\pi}$. Pallid yellowish testaceous. Abdomen above and beneath black, apical margins and laterally more or less widely pallid. Apical half of first segment and carinate edges of second segment of antenuæ, flagellum, basal half of frons (except the pustules) and a cloudy transverse band near the apical margin of the same, longitudinal stripes on femora, coxæ spotted or banded near the base, a large spot on each pleuron, anterior and intermediate tibix with two or three annulations, apical segment of tarsi, \&c., blackish or brownish. First genital segment large, deeply acuteangularly emarginate above.
¢. Like the male, but abdomen above and beneath stramineous, irregularly speckled with brownish. Ovipositor, \&c., blackish. Sheath not extending apically so far as the "scheidenpolster." Long. of $q$ $4 \frac{1}{2}$ mill.; to apex of elytra in long-winged form, $6 \frac{1}{4}$ mill.

Hawailan Isles: Oahu, Honolulu; destructive to sugar-cane. Is destroyed by the Reduviid Zelus peregrinus, Kirkaldy.

I have much pleasure in naming this interesting genus after Mr. R. C. L. Perkins, who has contributed more than any other man to our knowledge of the fauna of the fascinating Hawaiian Archipelago. As Mr. Perkins will shortly publish an exhaustive account, with figures, \&c., of this sugar pest, I have here merely established the genus and species. It may be added, however, that the nymphs are important, as showing a different head structure from the adults; in the former the frons is somewhat widely bicarinate, slightly outcurved, but subparallel, the two keels remaining separate from base to apex. It is probable that a comparative study of the nymphs in the Asiracinæ would give valuable hints as to the true affinities of the various genera in this very difficult and at present unsatisfactorily disposed subfamily.

## Fam. Gerrides.

## Microvelia singalensis, sp. nov.

Allied to M. lorice, Kirkaldy, but more elongate, the eyes larger, different proportions to the legs, \&c.

Elongate, abdomen subparallel laterally. Blackish, with silvery pilosity along the lateral margins of the head dorsad to the eye, anterior margin of pronotum, coxæ, femora, \&c. First segment and basal twothirds of second segment of antemnæ, ambulacra, legs (except apical segment of tarsi), stramineous. Head beneath, clypeus, rostrum (except fourth segment), connexiva, and lateral margins of abdomen beneath (at least basally), also apical abdominal sternite (more or less), and genital segment beneath, flavescent. Apical segment of tarsi, and third and fourth and apex of second segment of antennæ infuscate. Vertex narrowly longitudinally sulcate. Rostrum reaching to about
one-fourth of the lengtly of the mesosternum. Fourth segment of antennæ slender, tapering, one-half longer than third, which is onefourth longer than the first, the latter being slightly longer than the second. Pronotum carimate for three-fourths of its length ; posteriorly triangular, obtusely rounded. Elytra dark fumate, with five or six bluish white more or less wedge-shaped spots. Second segment of intermediate tarsi very slightly shorter than the third. Posterior femora simple, second and third segments almost subequal, second very slightly the longer.
б. Abdominal tergites carinate medio-longitudinally (except the first). Last "abdominal" tergite deeply, almost circularly emarginate.
f. Last three or four abdominal tergites carinate. Last "abdominal" tergite truncate. A little stouter than the male. Long. 1.6 to 1.7 mill., lat. 0.75 mill.

Hab. Ceylon, Pundaluoya (March, E. E. Green). Only the macropterous form known.

## Gerris selma, sp.n.

Belongs to typical subgenus (=Limnotrechus, Stitl), and is allied to G. coste, H.-Schäffer, but is larger, more elongate, the posterior margin of pronotum more rounded and more widely reflexed ; the metasternal tubercle is much nearer to the posterior margin of the metasternum, \&c. Closely allied also to G. gracilicornis (Horváth), but in the latter the abdominal sternites are not depressed on each side of the carina.

Head above and beneath, anterior lobe of pronotum, apical segment of rostrum, ventral surface, anterior tarsi, \&c., blackish, the head and pronotum covered with short olive-brown pubescence, the ventral surface with velvety pale greeuish yellow pubescence. Extreme apex of head, a small wedge-shaped spot anterior to the eyes, an obtuse V -shaped mark at base of vertex, the median line on the anterior lobe of pronotum, ambulacra in part, lateral margins of abdominal sternites, apical margin of seventh abdominal sternite, genital segments, \&c., flavo-fulvescent. Rostrum and anterior legs sordid flavescent; intermediate and posterior legs fulvous, more or less darkened; antennæ, posterior lobe of pronotum, lateral margin (as seen dorsally) of anterior lobe, connexival tergites, elytra, \&c., dark fulvous. Metasternal tubercles black. Abdominal sternites carinate, each comparatively considerably depressed on each side of the keel. First segment of intermediate tarsi two and a quarter times as long as the second (female), nearly three times (male).
$\sigma^{7}$ Anterior tibiæ slightly curved ; seventh abdominal sternite apically deeply emarginate.

ㅇ. Apical margin of seventh sternite subtruncate, very slightly obtusely pointed in the middle. Long. ठ $12 \frac{1}{4}$, \& $15-15 \frac{1}{2}$ mill.

India, Sikkim (colln. Kirkaldy) ; Kurseong (Mus. Belge).
Variable in shades of colouring, \&c., as are its allies. A series of colour-varieties from different localities would be interesting.

